



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,293	09/21/2005	Nicolas Pangaud	ASK-010	1905
32954	7590	09/20/2006	EXAMINER	
JAMES C. LYDON 100 DAINGERFIELD ROAD SUITE 100 ALEXANDRIA, VA 22314			KARACSONY, ROBERT	
			ART UNIT	PAPER NUMBER
			2892	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

EL

Office Action Summary	Application No.	Applicant(s)	
	10/550,293	PANGAUD ET AL.	
	Examiner	Art Unit	
	Robert Karacsony	2892	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>092105</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

The Declaration that the applicant has submitted has the incorrect filing date, 4/1/03.

Appropriate correct is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 3 and 5 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US Patent 6,642,896) in view of Garber et al. (US Patent 6,486,780).

Kim teaches a contactless reading system comprising,

contactless smart cards (430, Fig. 9), with the aim of identifying the card by means of identification data contained in the chip of the card.

a reader (col. 1/line 8) equipped with an antenna (col. 1/line 8) to read said identification data; wherein the antenna of said reader comprises,

a flat antenna support (50, Fig. 4; col. 3/lines 36-37) on which is fixed at least one turn of small dimension (140, Fig. 4; co.3/lines 36-37) in series (Fig 4; col.3/lines 38-40) with one turn of large dimension (120, Fig. 4; co.3/lines 36-37),

said turns being concentric (col. 5/lines 60-63) and having the same direction of winding (Fig 4; col.3/lines 38-40). Such a configuration inherently obtains a maximum value of the component (H) of an electromagnetic field produced by the antenna parallel to said antenna support.

Kim fails to teach that each smart card is being fixed on a flat support of an object. However, Garber et al. teach “markers, also related to “smart cards” (col. 2/lines 14-15), being bonded to a book” (col. 4/line 67 – col. 5/line 1) in order to utilize the advantages of an RFID system as opposed to that of a barcode-based system. These advantages include but are not limited to, retrieval of information contained on the card requiring less time and numerous useful applications in the areas of inventory control, item tracking, and sorting that would be difficult or impossible to implement with barcode-based identification systems (col. 7/lines 46-48; col. 8/lines 9-13). The Examiner takes Official Notice that in archiving books, it is well known to mount cards on the flat surfaces of the covers or pages. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have placed the smart cards of Kim on the flat support of the books in Garber et al. in order to have overcome the disadvantages of a barcode-base system such as requiring an unacceptably long time for information retrieval.

Kim also fails to teach that the reader be a mobile reader. Garber et al. teach that it is “desirable to provide a portable, preferably hand-held, RFID device (reader)”. This allows the

Art Unit: 2892

reader to be capable of searching among shelves, bins, piles and library carts (col. 14/lines 39-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the portable reader of Garber et al. with the reader of Kim in order to have been capable of searching among shelves, bins, piles and library carts, where the books of Garber et al. would have been located.

Since the reader is “mobile” and the card is placed on the flat support of a book, as discussed above, it is therefore capable for the reader to be positioned perpendicular to the flat support of the card so as to obtain maximum reception by the smart card of the electromagnetic signals transmitted by the said antenna.

Claim 2: Kim teaches said turns of small dimension and of large dimension are circular turns (col. 5/lines 56-57).

Claim 3: Kim in view of Garber et al. teach all the limitations of claim 2, as discussed above, however, Kim fails to teach wherein a ratio between the diameter of the circular turn of large dimension and the diameter of the circular turn of small dimension is between 2 and 3. However, Kim teaches that the strength of the magnetic field of the inner coil is reduced as the interval between the outer coil and the inner coil reaches a predetermined value, namely where a diameter of the inner coil is excessively small (col. 3/lines 48-53). The interval between coils is determined in part by the ratio of the diameter of the coils. Therefore, the ratio of the diameter is a result-effective variable because Kim recognizes that it would affect the strength of the magnetic field. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the ratio of Kim to have obtained a desired magnetic field strength.

Claim 5 – 7: Kim in view of Garber et al. teach all the limitations of claim 1 as well as that said contactless smart cards are fixed on a flat support, such as the covers, of books, as discussed above. Each cover of a book is substantially parallel to the predefined plane of the other cover. Garber et al. teach placing books vertically on a shelf of a library (Fig. 13; col. 1/lines 27-30), in which case the planes of the front and back covers are substantially vertical.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US Patent 6,642,896) in view of Garber et al. (US Patent 6,486,780) further in view of Waldner (2004/0100413).

Claim 4: Kim in view of Garber et al. teach all the limitations of claim 3, as discussed above. Kim fails to teach said reader includes three simple antennae in series, each comprising a small turn in series with a large turn, the antenna wire being wound so as to respect a symmetry of the resulting antenna and to obtain a uniformly distributed electromagnetic field according to radial symmetry. However, Waldner teaches an antenna which “may include any number of loops, such as 3, 5, 10, 15, 20, or more concentric loops” [0046] each loop being larger in diameter than the next the further you get from the center and symmetrical (Fig. 3). Waldner also teaches that the loops may be made from a single, continuous wire [0044]. Although Waldner illustrates his antenna as being rectangular in shape, he teaches that different geometric shapes may be used in order to obtain a desired electromagnetic field profile [0049]. Choosing circular turns will achieve a uniformly distributed electromagnetic field according to radial symmetry. It is advantageous to one with ordinary skill in the art to obtain a specific electromagnetic field profile. One advantage is to obtain maximum reception by a RFID tag when the RFID reader is oriented in a desired position. Therefore, it would have been obvious to

Art Unit: 2892

one of ordinary skill in the art at the time the invention was made to have used the antenna of Waldner as the antenna of Kim in order to have obtained maximum reception by a RFID tag.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Karacsony whose telephone number is 571-270-1268. The examiner can normally be reached on M-F 7:30-5 EST with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RK *RK*

Michael Cleveland
MICHAEL B. CLEVELAND
SUPERVISORY PATENT EXAMINER